DOCUMENT RESUME

ED 338 643 TM 016 924

AUTHOR Monsaas, Judith A.; Engelhard, George, Jr.
TITLE Attitudes toward Testing Practices as Cheating and Teachers' Testing Practices.
SPONS AGENCY West Georgia Coll., Carrollton.
PUB DATE Jul 91
NOTE 18p.; An earlier version of this paper was presented at the Annual Meetings of the Georgia Educational Research Association (October 1990) and the American Educational Research Association (Chicago, IL, April 3-7, 1991).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Measures; *Cheating; Educational Practices; *Elementary School Teachers; Elementary Secondary Education; Predictor Variables; Scores; *Secondary School Teachers; Socioeconomic Status; *Standardized Tests; Stress Variables; *Teacher Attitudes; Test Construction; Testing Problems; *Test Use

ABSTRACT

The purpose of this research was to investigate whether teachers' attitudes toward specific test preparation, whether they saw administration practices such as cheating, and the amount of pressure they felt to increase standardized test scores predicted teachers' test preparation and administration practices. Using the theory of personal action of M. Fishbein and I. Ajzen (1975), it was predicted that teachers' testing behavior would be a function of their attitudes and subjective norms, defined in this study as perceived pressure. A total of 186 classroom teachers (15% males and 85% females) from the northwest and western part of Georgia took the Testing Practices Instrument, an instrument developed to measure the three variables under study. Attitudes were negatively correlated with behavior. Teachers who felt that the testing practices were cheating were less likely to report engaging in them, and pressure was positively correlated with behavior. Other findings demonstrate negative correlations between grade level taught and teacher testing practices, and between student socioeconomic status and teacher testing practices. Implications for testing are discussed. One table presents study data. A 22-item list of references is included. (Author/SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
GEORGE ENGELHARD JR.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED338643

ATTITUDES TOWARD TESTING PRACTICES AS CHEATING AND TEACHERS' TESTING PRACTICES

Judith A. Monsaas

West Georgia College

George Engelhard, Jr.

Emory University

Address: Judith A. Monsaas
Department of Counseling
and Educational Psychology
West Georgia College
Carrollton, Georgia 30118

(404) 836-6554

An earlier version of this paper was presented at the Distinguished Paper Session at the annual meeting of the American Educational Research Association, April 1991. This paper was also presented and received the Distinguished Paper Award at the annual meeting of the Georgia Educational Research Association, October 1990. Support for this research was provided by a research grant from the Learning Resources Committee at West Georgia College. The authors would like to thank Dr. Wilton Key for his helpful support in this research.

[July 1991]

TM016924

BEST COPY AVAILABLE

Abstract

The purpose of this research is to investigate whether or not teachers' attitudes towards testing practices as cheating and the amount of pressure they feel to increase standardized test scores predicts teachers test preparation and administration practices. Using Fishbein and Ajzen's theory of personal action, it was predicted that teachers' testing behavior would be a function of their attitudes and subjective norms, defined as perceived pressure in this study. Classroom teachers (n=186) from the northwest and western part of Georgia took the Testing Practices Instrument (TPI), an instrument developed to measure the three variables under study. Attitudes were negatively correlated with behavior. Teachers who felt that the testing practices were cheating were less likely to report engaging in them, and pressure was positively correlated with behavior. Other findings demonstrated negative correlations between grade level taught and teacher testing practices, and between student SES and teacher testing practices. Implications of this research are discussed.

Attitudes Toward Testing Practices as Cheating and Teachers' Testing Practices

Tests play an important role in education today. Within schools, tests are used to assist in making decisions about educational placement, selection and evaluation. Increasingly, standardized tests are being used to hold teachers, principals and district superintendents accountable. Popham (1987) has used the term "high stakes" to refer to tests with severe consequences for pupils and those used to rank schools and districts in the media. Some of the potential consequences of high stakes tests have been identified by Cannell in his two reports (1987, 1989). In Cannell's first report, he found that, of the 32 states that tested elementary students on a full-time basis, all, or almost all, reported that their students were above average, a phenomenon that has been called the Lake Wobegon Effect. While educators (Phillips & Finn, 1988), test publishers (Drahozal & Frisbie, 1988; Lenke & Keene, 1988), and measurement specialists (Phillips, 1990; Linn, Graue & Sanders, 1990) have criticized Cannell's methodology, few have criticized his conclusions. Measurement specialists are currently attempting to understand the Lake Wobegon Effect. Some explanations include test-curriculum alignment (Phillips & Finn, 1988; Drahozal & Frisbie, 1988), dated norms (Phillips, 1990; Williams, 1988), and differences between the national norm group and user norms (Phillips, 1990). See Shepard (1990) for a summary of the explanations for "spuriously high achievement test scores."

Cannell's (1989) second report gave a different explanation for inflated test scores, namely, teacher cheating. He cited studies showing that cheating does occur (Perlman, 1985; McGraw & Wood, 1988) and implies that it is pervasive especially in states with high stakes testing. Unfortunately, much of his evidence is anecdotal. Shepard (1990) acknowledges that cheating does occur but in a small percentage of schools (1-3%), although she provides no supporting documentation for this estimate. One possible explanation for the differences in the estimates of cheating has to do with what types of behaviors one defines as cheating.

Mehrens and Kaminsky (1989) discuss various test preparation practices that may lead to increased scores on standardized tests. They suggested a continuum of test preparation activities ranging from those that most educators would consider ethical to those that most would consider unethical. While they avoid the use of the term "cheating", they define as "inappropriate" any practice which increases test scores without a concomitant increase in the behavior being measured. Therefore, they view some practices, such as using a former version of standardized tests in a district using a current form of the test, as cheating or inappropriate test preparation. In contrast, they cited a survey of Dallas teachers in which 54% of the teachers felt that this was not cheating. Haladyna et al. (1991) also provide a continuum of test preparation activities that range from ethical to highly unethical in an article describing what they refer to as "test score pollution". Their views on ethical testing practices parallel those of Mehrens and Kaminsky. Cannell (1989) views widely

accepted practices such as test-curriculum alignment as cheating, while many educators would agree that this leads to increased test scores and the Lake Wobegon effect, few would consider this practice cheating. Clearly, there are different views of the various testing practices as cheating and these views of which testing practices are cheating may be predictors of educators' likelihood of engaging in these practices.

Fishbein & Ajzen's (1975) theory of personal action provides a useful theoretical framework for examining the likelihood of teachers engaging in ethical and unethical testing practices. This theory assumes that the best predictor of behavior is intention. Behavioral intentions, in turn, are believed to be a function of one's attitudes toward the behavior and one's subjective norms. A subjective norm is one's perception of the extent to which significant others think one should engage in the behavior. Theoretically, both predictors are weighted equally, although one or the other may be more salient depending on the situation (Budd, 1986). According to this model, the likelihood of engaging in various testing practices is a function of the teachers' attitudes toward the practice as cheating and the expected normative behavior within their environment. It is expected that teachers are more likely to engage in testing practices behavior if they do not view them as cheating and/or feel pressure from the environment to engage in practices that will lead to higher test scores.

The purpose of this research is to investigate teachers' attitudes toward specific test preparation and administration

practices as cheating and the amount of pressure teachers feel to increase scores on standardized test as predictors of reported testing practices behavior. Testing practices are defined as those test preparation or administration practices designed to improve scores on standardized achievement tests.

In addition to teachers' attitudes and perceived pressures to increase test scores, it was felt that the characteristics of the students might also influence the teachers' likelihood of engaging in these testing practices. Therefore, the grade level and socioeconomic background of the students were also thought to influence teachers' behavior.

Method

Sample

The sample included 186 classroom teachers who were taking graduate courses in a regional college in Western Georgia during the Summer of 1990. The sample represented teachers from rural and small town districts in the northwest and western part of the state, as well as teachers from the metropolitan Atlanta area. Grade levels were collapsed to three categories: elementary (N=96), middle grades/junior high (N=57), and high school (N=33), because several teachers taught more than one grade level. SES was determined by teachers' reports of the percent of students receiving free or reduced price lunches in their school: 0-20% (N=57), 21-40% (N=55), 41-60% (N=32), 61-80% (N=26) and 81-100% (N=16). Scoring was reversed so lower scores reflect lower SES and higher scores reflect higher SES. The sample of teachers was 85% female and 15% male. Ninety percent of the

sample was white and 10% black. Gender and race were not included in the analyses reported here because of the small number of males and Blacks. Further, there was no rationale for hypothesizing differences based on these characteristics.

Instrument

The Testing Practices Instrument (TPI) was developed to measure the three variables under investigation: the amount of pressure that teachers feel to increase test scores (PRESSURE), teachers' attitude toward testing practices as cheating (ATTITUDE), and whether or not teachers engage in the testing practices (BEHAVIOR). The ATTITUDE and BEHAVIOR scales had 16 items each. The items on both scales were parallel. On the ATTITUDE scale, teachers were asked to report if they considered the testing practices cheating using a 4-point scale from definitely to not at all. The BEHAVIOR scale asked the teachers if they engaged in the behaviors, again using a 4-point scale from frequently to not at all. The 16 items included test preparation and test administration practices derived from the literature and interviews with teachers. The test preparation practices were modelled after the continuum of practices described by Mehrens and Kaminsky (1989). Test preparation practices included items such as "Teaching general test taking skills that will help on all standardized tests," and "Deliberately teaching questions and answers that you remember from the last time the test was administered in your school." Test
administration practices included such practices as "Allowing students extra time to complete the items during the

administration of a timed test," and "Giving students hints about correct answers while the test was being administered." The PRESSURE scale included 3 questions asking teachers how much pressure they felt from parents, school administrators, and district administrators to improve test scores. A 4-point scale from none at all to a great deal was used as the response format for the PRESSURE scale. Acceptable levels of reliability were obtained for the three scales: PRESSURE Scale, KR20=.74; ATTITUDE Scale, KR20=.72; BEHAVIOR Scale, KR20=.78.

Results

Correlation results show a negative relationship between Attitudes and Behavior, $r(184)=-.337$, $p<.001$. In other words, teachers are less likely to report engaging in behavior that they consider cheating. A negative correlation was also found between the grade level taught and behavior, $r(184)=-.206$, $p<.01$. Teachers of elementary students were more likely to report engaging in practices for enhancing test scores. Negative correlation was found between SES and testing practices behavior, $r(184)=-.300$, $p<.001$. Finally, a positive correlation was found between pressure to increase test scores and testing practices behavior, $r(184)=.195$, $p<.01$.

A general linear model was used to analyze the main effects and interactions. The results of this analysis are presented in Table 1.

Insert Table 1 about here

Both grade level and SES of the students were significant predictors of testing practices behavior. Pressure to increase standardized test scores had a significant effect on testing practices behavior after controlling for the grade level and SES of the students, $F(1,158)=7.06$, $p<.01$. Further, attitude toward testing practices as cheating was a significant predictor of testing practices behavior after controlling for grade level, SES and pressure, $F(1,158)=21.97$, $p<.001$. In addition to the significant main effects, there were two statistically significant two-way interactions. A significant interaction was found between the grade level taught and attitude as predictors of behavior. In order to explore this interaction, the correlations between ATTITUDE and BEHAVIOR were computed separately for each grade group. The correlation was stronger for elementary teachers, $r(94)=-.43$, $p<.001$, than for middle grades/junior high school teachers, $r(55)=-.28$, $p<.05$, and high school teachers, $r(31)=-.24$, ns. A second interaction was found between SES and ATTITUDE. Correlations between ATTITUDE and BEHAVIOR within SES groups were performed. Negative correlations were found between ATTITUDE and BEHAVIOR for all SES groups, except the lowest group. For the lowest SES group (81-100% free or reduced price lunches) a non-significant positive relationship was found, $r(14)=.25$, ns. No significant three-way interactions were found. The model accounts for 42 percent of the variance in testing practices behavior.

Discussion

The results of this study support the theory of reasoned action and confirm earlier research on the effects of attitudes and subjective norms on behavior (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980). In fact, in a meta-analysis, Sheppard, Hartwick & Warshaw (1988) calculated that the model (attitudes and subjective norms as predictors of behavior) accounted for forty-five percent of the variance in behavior, which is very close to the forty-two percent found for the model reported here. This suggests that the testing practices behaviors in which teachers engage are influenced by pressure to increase test scores as Cannell (1989) has suggested in his discussion of the effects of "high stakes" testing. This effect holds after controlling for the characteristics of the students taught. In other words, teachers engaged in more testing practices behaviors to enhance test scores when they felt pressure to increase test scores although the correlation is low (r=.19).

The data reported here also suggest that teachers' attitudes towards testing practices as cheating are even better predictors of testing practices than pressure to increase test scores. In fact, attitudes are significant predictors after controlling for grade level and SES of students and pressure to increase standardized test scores.

This suggests that whether or not one engages in testing practices is determined in part by whether or not one views the practices as cheating; i.e., teachers are more likely to engage in more testing practices behavior if they do not view the practices as

cheating.

The results also show two characteristics of the students that appear to mediate the effects of attitud on behavior, namely the grade level and SES of the students. These results are not surprising since research suggests that lower SES students have lower test scores and benefit more than other students from test wiseness training and coaching (Scruggs, White & Bennion, 1986). It may be that teachers feel that these students have limited test taking skills and need more assistance than students from other SES groups. Elementary students may be viewed by teachers as needing more help with standardized tests than older students as well. In addition, elementary students typically have one teacher for all of their classes and thus the teacher might feel more personal responsibility for low test scores and might therefore engage in more testing practices to increase students test scores. Responsibility for low scores at the higher grade levels would likely be spread among several teachers.

An interesting finding reported here is the interaction between grade level and attitude. The correlation between attitude and behavior was stronger for elementary teachers, than middle grades/junior high and high school teachers. The negative correlation between grade level taught and testing practices behavior demonstrates that teachers of older students engage in fewer practices to enhance standardized test scores. The weaker correlation between attitudes and behavior for higher grade teachers may be related to the fact that they engage in fewer testing practices. Further study is needed to understand

why elementary teachers engage in more testing practices and why the correlation between attitudes and behavior is greater for elementary teachers than teachers of upper grade children.

The interaction between SES and attitude is also interesting. The overall correlation between attitudes and behavior was negative, and correlations between attitudes and behavior were negative for all but one SES group. A nonsignificant positive correlation was found for the lowest SES group (81-100% free or reduced price lunch). While the sample size for this group was small (N=16) this result is suggestive. Teachers may feel compelled to engage in testing practices regardless of their view of the practice as cheating when dealing with the lowest SES group. Further investigation, with a larger, more diverse sample, is needed to see if this relationship stays the same.

In summary, test results play an important role in program planning, student placement, selection and evaluation, and educational research. If these test results are influenced by teacher cheating, their validity is clearly reduced. Most of the available evidence on cheating behavior is anecdotal. This study contributes to our understanding of some of the motivational and other factors related to testing practices, both ethical and unethical. The results suggest that teachers' attitudes about cheating and the amount of pressure to improve test scores are clearly related to their behavior. The results also suggest that characteristics of the students are also related to teachers' testing practices. That is, teachers of young children and lower SES children are more likely to engage in test

preparation and administration practices in order to enhance students' test scores than teachers of higher SES and older children.

According to Mehrens and Kaminsky (1989), teachers' views of testing practices as cheating differ from that of measurement experts. This could be due to the pressure to increase test scores due to "high stakes" testing. While the findings reported here suggests that pressure to improve test scores does predict behavior, a better predictor is teachers' views of whether or not these practices are cheating. The finding that teachers do not view many practices as cheating suggests that teachers may be unaware of the effect that certain practices have on the accuracy of scores. Many of the practices that invalidate inferences to the content domain are considered inappropriaate or "polluting" by measurement experts (Mehrens & Kaminsky, 1989; Mehrens, 1991; Popham, 1991; Haladyna, 1991) may not be considered unethical by teachers. Mehrens (1991) has pointed out that measurement professionals need to clarify what constitutes defensible and indefensible test preparation activities. While a causal relationship cannot be inferred from this study, the results are suggestive. It is possible that if teacher attitudes about these issues are changed through education, there may be a reduction in the frequency of questionable testing practices.

Table 1

Summary of Analysis of Variance for Effects of Grade Level Taught, SES of Students, Pressure and Attitudes on Testing Practices Behavior

Source of Variation	Sum of Squares[a]	F Value	df
GRADE (A)	525.41	8.93***	2
SES (B)	560.51	4.76**	4
PRESSURE (C)	207.65	7.06**	1
ATTITUDE (D)	646.31	21.97***	1
A X B	270.28	1.53	6
A X C	69.20	1.18	2
A X D	194.75	3.31*	2
B X C	224.63	1.91	4
B X D	559.06	5.09**	4
C X D	0.01	0.00	1
Within Group (Error)	4647.04		158
Corrected Total	7944.86		185

*$p<.05$, **$p<.01$, ***$p<.001$

a. Sequential sums of squares -- Type I SS (SAS Institute, Inc., 1985)

Note: No significant three-way interactions were found.

References

Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behavior. Englewood Cliffs, NJ: Prentice-Hall.

Budd, R. J. (1986). Predicting cigarette use: The need to incorporate measures of salience in the theory of reasoned action. Journal of Applied Social Psychology, 16(8): 663-85.

Cannell, J. J. (1987). Nationally normed elementary achievement testing in America's public schools: How all 50 states are above the national average. Daniels, West Virginia: Friends for Education.

Cannell, J. J. (1989). How Public Educators Cheat on Standardized Achievement Tests. Albuquerque, NM: Friends for Education.

Drahozal, E. C., & Frisbie, D. A. (1988). Riverside comments of the Friends for Education Report. Educational Measurement: Issues and Practice, 7(2), 12-16.

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley.

Haladyna, T. M., Nolen, S. B. & Haas, N. S. (1991). Raising standardized achievement test scores and the origins of test score pollution. Educational Measurement: Issues and Practice, 20(5), 2-7.

Lenke, J. M., & Keene, J. M. (1988). A response to John Cannell. Educational Measurement: Issues and Practice, 7(2), 16-18.

Linn, R. L., Graue, M. E., & Sanders, N. M. (1990). Comparing state and district results to national norms: The validity of the claim that "everyone is above average." Educational Measurement: Issues and Practice, 9(2), 5-14.

McGraw, C. & Wood, T. (1988, September 18). Pressures for high scores blamed on CAP test cheating. Los Angeles Times.

Mehrens, W. A. (1991). Defensible/indefensible instructional preparation for high stakes achievement tests: An exploratory trialogue. Presented as part of a symposium with N. S. Cole and W. J. Popham at the annual meeting of the American Educational Research Association.

Mehrens, W. A. & Kaminsky, J. (1989). Methods for improving standardized test scores: Fruitful, fruitless, or fraudulent? Educational Measurement: Issues and Practice, 8(1), 14-22.

Perlman, C. (1985, April). Results of a Citywide Testing Program Audit in Chicago. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Popham, W. J. (1987). The merits of measurement-driven instruction. Phi Delta Kappan, 68, 679-682.

Popham, W. J. (1991) Defensible/indefensible instructional preparation for high stakes achievement tests: An exploratory trialogue. Presented as part of a symposium with N. S. Cole and W. A. Mehrens at the annual meeting of the American Educational Research Association.

Phillips, G. W. (1990). The Lake Wobegon Effect. Educational Measurement: Issues and Practice, 9(3), 3, 14.

Phillips, G. W. & Finn, C. E. Jr. (1988). The Lake Wobegon Effect: A skeleton in the testing closet? Educational Measurement: Issues and Practice, 7(2), 10-12.

SAS Institute, Inc. (1985). SAS User's Guide: Statistics. Cary, NC: Author.

Scruggs, T., White, K., & Bennion, K. (1986). Teaching test-taking skills to elementary grade students: A meta-analysis. The Elementary School Journal, 87(1), 69-79.

Shepard, L. A. (1990). Inflated test scores: Is the problem old norms or teaching the test? Educational Measurement: Issues and Practices, 9(3), 15-22.

Sheppard, B. H., Hartwick, J. & Warshaw, P. R. (1988). A theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. Journal of Consumer Research, 15, 325-43.

Williams, P. L. (1988). The time bound nature of norms: Understandings and misunderstandings. Educational Measurement: Issues and Practice. 7(2), 18-20.